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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,485	03/01/2004	Akihisa Shouen	826.1933	7539

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EXAMINER	
HSU, JONI	

ART UNIT	PAPER NUMBER
2628	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/788,485	SHOUEN, AKIHISA	
	Examiner	Art Unit	
	Joni Hsu	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-6,8-10 and 12-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-6,8-10 and 12-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2007 has been entered.

Response to Arguments

2. Applicant's arguments filed October 31, 2007 are fully considered but are not persuasive.

3. Applicant argues in Gore (US005128878A), it is the user that enters coordinates while on client display, and so, this is no simulation on server to produce lower-definition image before image data is transmitted to client display. The ability to "zoom in" and "zoom out" after image is already displayed on client does not describe simulating on server a display process of client display device to produce lower-definition image data (p. 5).

In reply, Examiner points out Gore describes that in prior art, each client workstation performs rasterization process for each hardcopy plot request. As a result, client workstation user cannot make productive use of client workstation during rasterization processing (c. 1, ll. 59-c. 2, ll. 5). In Gore's invention, plot server is programmed with software which enables user to generate plot output without interrupting work proceeding on client workstation from which plot is originally requested. Plot server encompasses raster server to specifically handle rasterization of data (c. 2, ll. 46-53). Since in prior art each client workstation performs rasterization process, rasterization process is considered to be display process of client display device. Since

rasterization process is instead performed on server, this is considered to mean display process of client display device (rasterization process of client workstation) is simulated on server. Gore describes rasterization process to create plot template includes that when Rplot command has been selected, size of plot is obtained according to size of current view port on workstation display, and current magnification value of view port. Viewport is portion of normalized device coordinate space currently displayed on client workstation. This value can be anything from entire contents of data file down to maximum allowed magnification. Output plot represents visible portion of data file currently displayed on client workstation at creation time of design file plot template (c. 7, ll. 56-c. 8, ll. 29). If values are outside legal range, creating skewed aspect ratio, system automatically adjusts plot size in x or y direction as appropriate (c. 8, ll. 57-68). So, rasterization process reduces resolution of image so it can be displayed on client display, and so produces lower-definition image data as client display data. Rasterization process outputs to memory (c. 6, ll. 65-66; c. 1, ll. 33-35), and so produces in memory the lower-definition image data. So, Gore teaches this limitation as it is recited in claims. Examiner also points out the passage of Gore cited by Applicant about "zoom in" and "zoom out" is actually referring to passage where Gore describes analogy to camera in order to visualize the method of Gore's invention (c. 8, ll. 7-29), and so passage does not appear to be saying that method of Gore's invention is actually "zooming in" and "zooming out" after image is already displayed on client.

Claim Rejections - 35 USC § 102

4. Text of sections of Title 35, U.S. Code 102(b) not included can be found in prior action.

5. Claims 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gore (US005128878A).

6. As per Claim 14, Gore describes that rplot 360 creates a design file plot template which contains a "pointer" to reference the actual data of design file 320 stored in design file database 325 in the file server (c. 6, ll. 47-68). Therefore, the actual data of design file 320 is stored in the file server. The user selects the Rplot command, and when the Rplot command has been selected, the size of the plot is obtained according to the size of the current view port on the workstation display, and the current magnification value of the view port. The viewport is that portion of normalized device coordinate space currently displayed on the client workstation. This value can be anything from the entire contents of the data file down to the maximum allowed magnification. The output plot represents the visible portion of the data file currently displayed on the client workstation at the creation time of the design file plot template (c. 7, ll. 56-c. 8, ll. 29). Therefore, the Rplot command selected by the user results in extracting a viewport (designated portion) of a display result to be displayed on the client display device as display data from the design file (original image data) which is stored in the file server, since rplot 360 creates a design file plot template which contains a "pointer" to reference the actual data of design file 320 stored in the file server (c. 6, ll. 47-68). Therefore, Gore teaches that the user is designating a plot (or image) stored by the file server 230, and a viewport (e.g., designated portion) is extracted from the file server 230, and the viewport is transmitted to the client workstation 210. Gore describes that the user runs a program, called a client program on a client workstation, and the server converts the request and arguments into a locally useful form, runs the requested service, packages the results, and sends them back to the client (c. 6, ll. 12-32). Therefore, the user makes a request on the client workstation, and the server runs the requested service. Since the user requests the rplot command, which performs the extracting (c.

7, ll. 56-c. 8, ll. 29; c. 6, ll. 47-68), this means that the server runs the requested extracting (c. 6, ll. 12-32). Gore describes that in the prior art, each client workstation performs the rasterization process for each hardcopy plot request. As a result, the client workstation user cannot make productive use of the client workstation during rasterization processing (c. 1, ll. 59-c. 2, ll. 5). In Gore's invention, the plot server is programmed with software which enables the user to generate plot output without interrupting work proceeding on the client workstation from which the plot is originally requested. The plot server encompasses a raster server to specifically handle rasterization of data (c. 2, ll. 46-53). Since in the prior art each client workstation performs the rasterization process, the rasterization process is considered to be a display process of the client display device. Since the rasterization process is instead performed on the server, this is considered to mean that a display process of the client display device (rasterization process of the client workstation) is simulated on the server. The rplot command which performs the extracting is included in the rasterization process of creating a plot template (c. 7, ll. 56-c. 8, ll. 29; c. 6, ll. 47-68). Therefore, Gore discloses a display method, comprising allowing a user to designate a portion of an image stored by a server; extracting, by the server, only the designated portion by simulating on the server a display process of a client display device; and transmitting the designated portion to a client for display thereon (c. 7, ll. 56-c. 8, ll. 29; c. 6, ll. 12-32, c. 6, ll. 47-68; c. 1, ll. 59-68; c. 2, ll. 1-5, 46-53).

7. As per Claim 15, Gore describes that rplot 360 creates a design file plot template which contains a "pointer" to reference the actual data of design file 320 stored in design file database 325 in the file server (c.. 6, ll. 47-68). Therefore, the actual data of design file 320 is stored in the file server. The user selects the Rplot command, and when the Rplot command has been

selected, the size of the plot is obtained according to the size of the current view port on the workstation display, and the current magnification value of the view port. The viewport is that portion of normalized device coordinate space currently displayed on the client workstation. This value can be anything from the entire contents of the data file down to the maximum allowed magnification. The output plot represents the visible portion of the data file currently displayed on the client workstation at the creation time of the design file plot template (c. 7, ll. 56-c.. 8, ll. 29). Therefore, the Rplot command selected by the user results in extracting a viewport (designated portion) of a display result to be displayed on the client display device as display data from the design file (original image data) which is stored in the file server, since rplot 360 creates a design file plot template which contains a "pointer" to reference the actual data of design file 320 stored in the file server (c. 6, ll. 47-68). Therefore, Gore teaches that the user is designating a plot (or image) stored by the file server 230, and a viewport (e.g., designated portion) is extracted from the file server 230, and the viewport is transmitted to the client workstation 210. Gore describes that the user runs a program, called a client program on a client workstation, and the server converts the request and arguments into a locally useful form, runs the requested service, packages the results, and sends them back to the client (c. 6, ll. 12-32). Therefore, the user makes a request on the client workstation, and the server runs the requested service. Since the user requests the rplot command, which performs the extracting and resizing (c. 7, ll. 56-c. 8, ll. 29; c. 6, ll. 47-68), this means that the server runs the requested extracting and resizing (c. 6, ll. 12-32). Therefore, Gore discloses a display method, comprising allowing a user to designate a portion of an image stored by a server for display by a client; extracting and resizing, by the server, only the designated portion for display; and transmitting

the designated resized portion to a client for display thereon (c. 7, ll. 56-c. 8, ll. 29; c. 6, ll. 12-32, 47-68). Gore teaches extracting and resizing are performed by simulating on the server a display process of a client display device, as discussed for Claim 14.

8. Thus, it reasonably appears that Gore describes or discloses every element of Claims 14 and 15 and therefore anticipates the claims subject.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code 103(a) not included in this action can be found in a prior Office action.

10. Claims 1, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schauser (US006331855B1) in view of Gore (US005128878A).

Schauser discloses that the source computer 2 detects changes to the desktop 8 of its own computer, and the source computer 2 forwards the detected changes to the remote computer 4 (c. 3, ll. 57-c.. 4, ll. 6), this means an image is displayed on the desktop 8 of the source computer 2 first. Schauser describes that the computer detects changes by polling a number of subregions of the screen, to determine if a change has occurred, compares a portion of the currently displayed image to a corresponding portion of a previously displayed image to determine if changes have occurred, and if so, the changes are forwarded to the remote computer 4 (c. 5, ll. 6-24). The computer determines the exact extent of the change, and examines a predetermined number of pixels surrounding the detected change, for example, 20 pixels to the left, right, top and bottom of the detected change, and the detected changes are then communicated to the remote processing system 4 (c. 6, ll. 22-42). Since an entire image is currently displayed on the desktop 8 of the source computer 2 first (c. 3, ll. 57-c. 4, ll. 6), and the source computer 2 then detects the

changes by comparing a portion of the currently displayed image to a corresponding portion of a previously displayed image, and if changes have occurred, the changes are forwarded to the remote computer (c. 5, ll. 6-24), this means that the changed portion of the image is extracted from the currently displayed image of the source computer 2 and is forwarded to the remote computer. Therefore, Schauser discloses a display processing apparatus which converts generated original server (2, Fig. 1A) image data and transmits the converted data to a client display device (4), comprising a server extraction unit extracting only a designated portion of a display result to be displayed on the client display device as visually recognizable data from the original image data by determining the dimensions of the display data to be transmitted; and a transmission unit (6) transmitting the client display data to the display device (*graphics output is captured as a bitmap on the server and then transported to the client computer*, c. 1, ll. 43-51; *upon detection of changes to the desktop 8 of the source processing system 2, the source processing system 2 forwards the detected changes to the remote processing system 4 via the communication of transportation medium 6*, c. 3, ll. 57-c. 4, ll. 6; c. 5, ll. 6-24; c. 6, ll. 22-42).

However, Schauser does not teach determining display region with vertical-to-horizontal length ratios and corner coordinate rounding calculations for designated display and extracting is performed by simulating on server a display process of client display device to produce in memory a lower-definition image data as client display data. However, Gore teaches determining display region with vertical-to-horizontal length ratios and corner coordinate rounding calculations for designated display (c. 7, ll. 56-c. 8, ll. 29; *if these new values are outside a legal range, creating a skewed aspect ratio, the system automatically adjusts the plot size in the x or y direction as appropriate*, c.. 8, ll. 57-68). Gore teaches extracting is performed by simulating on

server a display process of client display device, as discussed for Claim 14. Gore teaches rasterization process to create a plot template includes that when Rplot command has been selected, size of plot is obtained according to size of current view port on workstation display, and current magnification value of view port. Viewport is that portion of normalized device coordinate space currently displayed on client workstation. This value can be anything from entire contents of data file down to maximum allowed magnification. Output plot represents visible portion of data file currently displayed on client workstation at creation time of design file plot template (c. 7, ll. 56-c. 8, ll. 29). If values are outside legal range, creating skewed aspect ratio, system automatically adjust plot size in x or y direction as appropriate (c. 8, ll. 57-68). So, rasterization process reduces resolution of image so it can be displayed on client display, and so produces lower-definition image data as client display data. Rasterization process outputs to memory (c. 6, ll. 65-66; c. 1, ll. 33-35), and so produces in memory the lower-definition image data. So, Gore teaches extracting is performed by simulating on server a display process of client display device to produce in memory a lower-definition image data as client display data.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify the device of Schauser to include determining a display region with vertical-to-horizontal length ratios and corner coordinate rounding calculations for a designated display as suggested by Gore because Gore suggests the advantage of ensuring that the extracted display data can be displayed correctly on the client display device (c. 8, ll. 57-68). It would have been obvious to modify the device of Schauser so that the extracting is performed by simulating on the server a display process of the client display device to produce in memory a lower-definition image data as client display data as suggested by Gore because Gore suggests that this minimizes

lost productivity caused by time-consuming plot rasterization that renders a client workstation unusable until the rasterization is complete (c. 1, ll. 59-68; c. 2, ll. 1-24, 46-53).

11. Claims 4, 5, 8, 9, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schauser (US006331855B1) and Gore (US005128878A) in view of U.S. Patent No. 6,246,421 to Omori.

12. As per claims 4, 8 and 12, Schauser and Gore are relied upon for the teachings as discussed above relative to Claim 1. Schauser discloses extracting pixel data (c. 5, ll. 6-24).

However, Schauser and Gore **do not disclose** graphics data namely the digital image being processed and transmitted to be a three-dimensional graphics. Omori **discloses** geometry computing section 4 implementing such processes as coordinate transformation, clipping and the like for polygon rendering data (c. 3, ll. 10-51). Therefore, it would have been obvious to a person of ordinary skill in the art at the time invention was made to modify the devices of Schauser-Gore to handle Omori's three-dimensional graphics image data as well **because** it reduces the bandwidth required for transmitting three-dimensional graphics data to a remote location thus reducing costs.

13. As per claims 5, 9 and 13, Schauser-Gore combination **does not disclose** division of the original image data into a plurality of areas, and allowing a plurality of independent process units to process the areas, thereby performing extracting processes in parallel. Omori **discloses** dividing a two-dimensional image coordinate system into areas each composed of a plurality of pixels (NxM pixels in total)(c. 2, ll. 4-50) and allocating NxM circuits respectively to the NxM pixels contained in that area, which results in time required for rendering to be shortened. Therefore, it would have been obvious to a person of ordinary skill in the art at the time

invention was made to modify the device as taught by Schauser-Gore combination with the feature "plural rendering circuits for plurality of areas performing extracting processes in parallel" as taught by Omori **because** it would speed up graphics processing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joni Hsu whose telephone number is 571-272-7785. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JH

KEE M. TUNG
SUPERVISORY PATENT EXAMINER